

AMENDMENTS TO THE CLAIMS

1. (CURRENTLY AMENDED) A method for decoding a bitstream comprising the steps of:

(A) receiving a first bitstream, wherein said first bitstream comprises an intra-only frame picture stream encoded 5
bitstream comprising alternating macroblock rows, with each row containing data for a plurality of vertical lines from a single respective field;

(B) generating a first field picture and a second field picture in response to said first bitstream, wherein said first
10
field picture comprises macroblock rows containing the data for the
plurality of vertical lines from a first field of the frame picture
and said second field picture comprises macroblock rows containing
the data for the plurality of vertical lines from a second field of
the frame picture; and

(C) generating a second bitstream comprising said first field picture and said second field picture, such that wherein said second bitstream comprises an intra-only field picture encoded
bitstream and is decodable as interlaced field pictures using an 15
MPEG-2 compliant decoder.

2. (ORIGINAL) The method according to claim 1, wherein said generating steps further comprise:

copying a frame header from said first bitstream into a
first field header portion of a first field buffer and a second
5 field header portion of a second field buffer; and

modifying (i) a portion of said first field header
portion to indicate a top field picture and (ii) a portion of said
second field header portion to indicate a bottom field picture.

3. (PREVIOUSLY PRESENTED) The method according to claim
2, wherein said generating steps further comprise:

copying a plurality of said macroblock rows from said
first bitstream to said first field buffer and said second field
5 buffer, wherein said copying alternates between said first and said
second buffers after each macroblock row.

4. (PREVIOUSLY PRESENTED) The method according to claim
3, wherein said generating steps further comprise:

adjusting a slice number of each macroblock row in said
first field buffer and said second field buffer to increment
5 consecutively.

5. (ORIGINAL) The method according to claim 1, wherein
step (C) further comprises:

writing said first field picture and said second field
picture consecutively to said second bitstream.

6. (ORIGINAL) The method according to claim 4, wherein step (C) comprises:

writing said first field buffer followed by said second field buffer to said second bitstream.

7. (ORIGINAL) The method according to claim 1, further comprising the step of:

presenting said second bitstream to a video decoder.

8. (ORIGINAL) The method according to claim 7, wherein said video decoder is configured to support a field picture mode.

9. (CURRENTLY AMENDED) The method according to claim 7, further comprising:

5 presenting even ~~and odd~~ field lines on a television monitor in response to said first field picture of said second bitstream and odd field lines on said television in response to said second field picture of said second bitstream.

10. (CURRENTLY AMENDED) An apparatus comprising:

means for receiving a first bitstream, wherein said first bitstream comprises an intra-only frame picture stream encoded bitstream comprising alternating macroblock rows, with each row

5 containing data for a plurality of vertical lines from a single
respective field;

means for generating a first field picture and a second
field picture in response to said first bitstream, wherein said
first field picture comprises macroblock rows containing the data
10 for the plurality of vertical lines from a first field of the frame
picture and said second field picture comprises macroblock rows
containing the data for the plurality of vertical lines from a
second field of the frame picture; and

15 means for generating a second bitstream comprising said
first field picture and said second field picture, such that
wherein said second bitstream comprises an intra-only field picture
encoded bitstream and is decodable as interlaced field pictures
using an MPEG-2 compliant decoder.

11. (CURRENTLY AMENDED) An apparatus comprising:
a circuit configured to

(i) receive a first bitstream, wherein said first
bitstream comprises an intra-only frame picture stream encoded
5 bitstream comprising alternating macroblock rows, with each row
containing data for a plurality of vertical lines from a single
respective field,

(ii) generate a first field picture and a second
field picture in response to said first bitstream, wherein said

10 first field picture comprises macroblock rows containing the data
 for the plurality of vertical lines from a first field of the frame
 picture and said second field picture comprises macroblock rows
 containing the data for the plurality of vertical lines from a
second field of the frame picture, and

15 (iii) generate a second bitstream comprising said
 first field picture and said second field picture, ~~such that~~
wherein said second bitstream comprises an intra-only field picture
encoded bitstream and is decodable as interlaced field pictures
 using an MPEG-2 compliant decoder.

12. (ORIGINAL) The apparatus according to claim 11,
 wherein said circuit comprises:

 a first field buffer;
 a second field buffer; and

5 a transform circuit configured to (i) copy a frame header
 from said first bitstream into a first field header portion of said
 first field buffer and a second field header portion of said second
 field buffer.

13. (ORIGINAL) The apparatus according to claim 12,
 wherein said transform circuit is further configured to:

5 modify (i) a portion of said first field header portion
to indicate a top field picture and (ii) a portion of said second
field header portion to indicate a bottom field picture.

14. (PREVIOUSLY PRESENTED) The apparatus according to
claim 12, wherein said transform circuit is further configured to:

5 copy a plurality of said macroblock rows from said first
bitstream to said first field buffer and said second field buffer,
wherein said copying alternates between said first and said second
buffers after each macroblock row.

15. (PREVIOUSLY PRESENTED) The apparatus according to
claim 14, wherein said transform circuit is further configured to:

5 adjust a slice number of each macroblock row in said
first field buffer and said second field buffer to increment
consecutively.

16. (ORIGINAL) The apparatus according to claim 12,
wherein said transform circuit is further configured to:

5 write an output from said first field buffer and an
output from said second field buffer consecutively to said second
bitstream.

17. (ORIGINAL) The apparatus according to claim 11,
further comprising:

a video decoder circuit configured to receive said second
bitstream.

18. (ORIGINAL) The apparatus according to claim 17,
wherein said video decoder circuit is further configured to support
a field picture mode.

19. (CURRENTLY AMENDED) The apparatus according to claim
17, wherein said video decoder circuit is further configured to
present even ~~and odd~~ field lines on a television monitor in
response to said first field picture of said second bitstream and
5 odd field lines on said television in response to said second field
picture of said second bitstream.

20. (ORIGINAL) The apparatus according to claim 11,
wherein said first bitstream comprises an intra-only MPEG-2 frame
picture stream.

21. (PREVIOUSLY PRESENTED) The apparatus according to
claim 16, wherein said transform circuit is further configured to:
write sequence-related information from said first
bitstream to said second bitstream.

22. (PREVIOUSLY PRESENTED) The apparatus according to claim 21, wherein said transform circuit modifies one or more portions of sequence-related headers from said first bitstream prior to output in said second bitstream.